The 3rd EuroSoTL conference, June 13-14 2019, Bilbao, Basque Country-Spain

Students as Partners in Redesigning and Delivery of the Curriculum

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ABSTRACT

Student-Staff Partnership (SSP) encapsulates the pedagogy of teaching and learning in various settings through student-staff reciprocal partnership practices in the Higher Education (HE) sector. The application of SSP for successful redesigning and delivery of the curriculum can be traced across various disciplines in a number of pedagogical contexts. This paper narrates a case study of how educators can partner with first year undergraduate students to redesign and deliver an existing module curriculum through co-creation of e-learning materials for teaching and learning. It also exemplifies how readily accessible digital applications can be used in order to develop students' digital literacy skills and promote inquiry based learning in the process.

An action research project was undertaken to assess the benefits of including specific digital applications in the curriculum in order to promote leaners' digital literacy skills. The impact of SSP as an approach for curriculum redesign, delivery and as a facilitator of research and inquiry skills in undergraduate students was also evaluated in the process through the co-creation of e-learning materials.

A focus group was conducted to capture participants' responses and thematic content analysis was undertaken for data analysis. Findings suggests, using digital applications for co-creation of e-learning materials improved learners' confidence in embracing and using digital applications for learning, communication and dissemination of evidence based information through the process of inquiry and research based learning. Additionally, students found SSP effective as an approach for redesigning the curriculum since it provides a platform to capture students' expectations of the use of relevant digital applications in the delivery of the curriculum to facilitate learners' digital literacy skills development processes. Furthermore, through this project a large database of co-created e-learning materials were generated which were integrated into the module for blended learning and future re-purpose in the delivery of the curriculum.

1 INTRODUCTION

As part of a summative assessment requirement of a postgraduate Continued Professional Development (CPD) module, it was necessary to review the existing curriculum design of an undergraduate taught module and apply an action research approach to evidence any weaknesses identified in the curriculum design followed by implementation of a test of change. Using Prideux's (2003) situational model to assess and analyse a curriculum, the curriculum design of a first year accountancy undergraduate module titled as 'Accountants in the Business Environment' was assessed. It was evident that the existing curriculum was designed to be delivered in a technologically well-equipped classroom where students will have access to desktop computers and high speed internet. Though one of the module learning outcomes particularly emphasised on developing students' digital literacy skills in the curriculum delivery process, however, the contexts of the curriculum delivery process in which students' digital literacy skills can be developed and evaluated or the tools that can be used to challenge and stretch existing digital literacy skills of learners, were not clearly defined in the curriculum design.

With access to high-speed Internet, Wi-Fi and the growth in handheld web-enabled 'smart' devices there is a divide between using online technologies for education and using them for leisure. Relatively few students claim to be digital content creators although many own a web-enabled tablet, laptop or phone with easy access to digital applications for learning (Jones et al., 2012). Neary et al. (2013) argued that, focusing the role of students in the co-production of digital materials to support curriculum delivery and personalised learning for their own and others', enhances learners' creativity and turns students and

ISBN: 978-84-1319-033-4

teachers as collaborative explorers in unchartered territories. One of the many approaches to curriculum design is to engage students as co-designers of the curriculum and to include them in pedagogical planning processes through SSP (Bovill et al., 2011; Healey et al., 2014). SSP for curriculum design can be traced in a number of contexts such as influencing courses and university wide curriculum renewal; re-designing a course in the semester prior to teaching it again; and partnering with students in the review of a whole degree program curriculum (Bell et al., 2019).

In order to address the weaknesses identified in the curriculum design of this module, the following aims were set:

i. To engage an existing cohort of first year undergraduate students studying this module in a Student-Staff Partnership (SSP) approach, in order to evaluate the necessity to redesign the module curriculum before it is delivered again in the following academic year;
ii. To co-create e-learning materials with the students for curriculum delivery in order to assess the inclusion of specific digital applications in the curriculum that will enable the process of students' digital literacy skills development.

2 LITRATURE REVIEW

Students' expectations in terms of communication and technology from the university has changed dramatically in the past decade. Most students today, who represent the first generation to grow up surrounded by technology where the internet, computer, phones and instant messaging are part of their lives, are used to communicating electronically though multitasking. On the contrary, academics, described as 'digital immigrants' in some literature, who have not taken certain technological forms for granted, may still be expected to use some of them in the delivery of the curriculum. As such, there may be a gap in the expectations of students' perception of the use of technology in teaching and learning which may be influenced by the place of technology in the society as opposed to those of educators' who may expect students' to learn in the same manner as they did some 20 years ago (Woodcock, 2012; Jones, et al., 2012). This could impact student learning in the class due to possible disintegration in the expectation levels.

Emerging evidences suggests that learners struggle to search and retrieve information from online sources and find time in the curriculum to develop competencies in using digital technology confidently for learning (Buckley et al., 2010). In order to enable students to take control over their learning needs, educators can nurture power-sharing relationship with students over digital contents creation. This can be achieved by treating students as partners, producers, curators, co-creators and collaborators (McPherson & Heggie, 2015; Mercer-Mapstone et al., 2017) of e-learning materials using various educational applications (Terrel, 2017).

Engaging students in partnership in the designing of digital materials as resources that are suitable for repurpose across different contexts supports learner engagement at different modes. A key criteria however is to ensure students' inform the design and implementation process. Through this measure which is a very old idea of curriculum design, learners set their own learning goals, manage their learning, appropriates digital applications and media for their learning practice thus embarking on an interactive journey that enables them to develop and acquire learning and digital literacy skills (Greaves, 2012). According to Oddone (2016), the role of technology can be reimagined in education by allowing students to use it for coding, media production, design and peer collaboration so as to transform learners from passive consumers of digitized learning materials to active consumers.

The benefits of engaging students in producing and creating e-learning materials using digital applications is manifold. It is linked to institutional virtual learning environments (VLEs) to scaffold learning, promotes learning from peers through sharing (Van Dijk & Lazonder, 2016) and also generates carefully crafted e-learning materials designed to support learners. These learning materials can be used either in tutor-mediated or personalised contexts and would reduce the pressure on staff for repeated delivery of the same information (Greaves, 2012). Thus, employing this initiative would provide a scope to the teachers to design curricula that promotes digitally enriched learning environment and provide opportunities for learners to develop their digital bravery skills to survive in a digitally connected world (Terrel, 2017).

ISBN: 978-84-1319-033-4

Healey et. al., (2014) suggested a holistic process to engage students in partnership for co-designing of the curriculum. This process will be applied (as illustrated in *Figure 2.1 Four stages of engaging students in partnership*) to set the scene for addressing the problem identified with the module curriculum design in order to work in partnership with the students using an action research process as defined by Millwood et al. (2009).

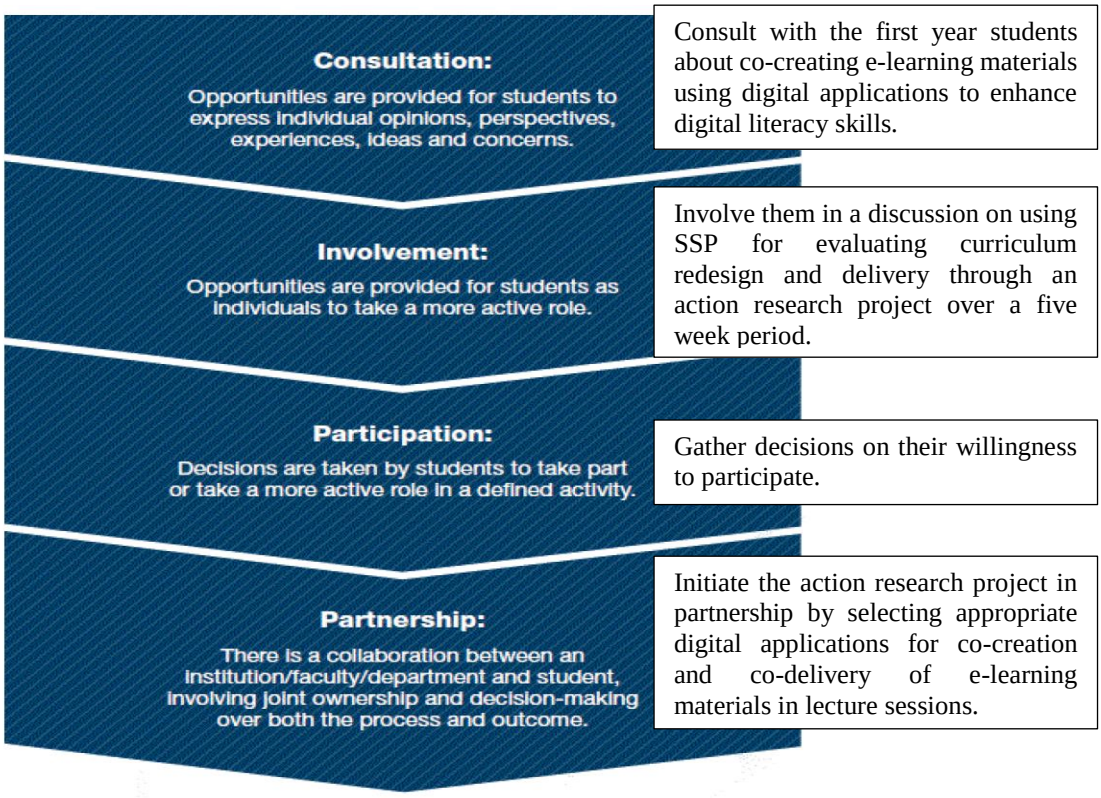

Figure 2.1: Four stages of engaging students in partnership (Healey et. al., 2014).

It must be stressed here that SSP has been described as more of a process of doing things rather than a measure for the achievement of predetermined outcomes (Mathews, 2017; Healey et al., 2014). Some findings reported that SSP may re-inforce pre-existing power inequalities and the feeling of vulnerability among students and staff (Mercer-Mapstone et al., 2017). Students' 'fixed' assumptions of their role expectations before entering the university may make it difficult for them to comprehend or appreciate working in partnerships with tutors and this may prevent them from engaging in SSP and explore its potential for teaching and learning (Rakrouki, et al, 2017). Nevertheless, 74% of the existing literature on SSP highlighted personal development of both staff and students with the potential to enhance skills, motivation, creativity, staff-student communications and self-efficacy as some of the key outcomes of the partnership process (Matthews, et al., 2017).

3 METHOD

The dissemination of the action research project involved collaborating with 35 first year undergraduate students studying the module in semester 2 of the academic year 2017/18. The project spanned over five weeks. In the final week, all 35 students enrolled on the module were sent an e-mail inviting them to participate in a focus group since this method of qualitative data collection has proved to be popular with those running pilot tests for curricula or program development and outcome evaluation (Leung & Savithiri, 2009). The focus group questionnaire consisted of 10 open-ended questions that were adapted from Curran (2017) and Mathews, et al., (2017). The questions were designed to capture students' perspectives on the need to be digitally brave through exploration of digital applications for learning and its inclusion in the curriculum; the impact of SSP as an approach for curriculum redesign; any changes they may have observed in their inquiry skills and learning processes as a result of this partnership.

ISBN: 978-84-1319-033-4

6 students in total participated in the focus group which lasted for a duration of 45 minutes. Thematic content analysis as described by Braun and Clarke (2006) was applied to analyse the responses received to search for themes, define and name them and to select compelling examples (Bell et al., 2019). A summary of the digital applications that were used for this study is illustrated below in *Table* 3.1 *Digital applications used for co-creation*:

Week	Digital application	Function	Instructions Given	Outcome
1	**Sutori**	A student centered approach for Collaborative learning for the flipped classroom using timeline presentations for storytelling (Sutori, 2019).	Use Sutori to independently collate and organise various online resources relevant to a module topic in the form of a personalised storyline and present in the classroom.	A database of online resources collated by the students for classroom delivery as well as repurpose for online blended learning.
2	**Canva**	A graphic-design tool used for both web and print media design and graphics. It enables users to access over a million photographs, graphics, and fonts and use them by applying a drag-and-drop format (Canva, 2019).	Use Canva to work in pairs to create an infographic on a module topic and present it to fellow students and the tutor to generate group discussion.	A compilation of infographics co-designed and created by the students, which can be used for the explanation of theoretical concepts in future delivery of the module topic.
3	**PowToon**	A readily available application that enable users to create videos individually or in collaboration in order to captivate, engage and explain (PowToon, 2019).	Students to collaborate by working in small groups in order to create short length interactive videos on PowToon to explain a number of module topics to the class.	A selection of online educational videos co-designed and created by the students for classroom delivery as well as for
4	**Prezi and Kahoot**	Prezi - A presentation application that provides the scope to create and publish interactive presentations online (Prezi, 2019).	To co-deliver a lecture session with the tutor using these applications. Students worked in partnership with the tutor to discuss the scheme of work including for the topic selected.	This process involved the students in setting the learning objectives for the selected topic and selection of formative assessment activities to assess learners. This enabled the students' who co-delivered the teaching and learning session to extend their skills and awareness's of behind-

ISBN: 978-84-1319-033-4

		Kahoot -An application that provides a platform for game based learning that is particularly suitable for designing formative assessment activities (Kahoot, 2019).		the-scenes curriculum development processes at the university (Bell et al., 2019).
5	**Loop**	A digital feedback application that enables tutors to capture student voices in real-time in order to adapt classrooms to maximize learning outcomes and gather evidence to support impact (Loop, 2018).	This application is accessible on smart phones as well as desktop computers. The focus group participants were asked to download and install the application on their smart phones prior to the focus group session so that they can access the questionnaire during the session using a code generated by the application.	Using this application enabled participants to record their responses quickly and easily using their smart phones. It also saved time with data transcription since a feature of this application enables quick import of data onto an external spreadsheet such as Microsoft Excel for analysis purposes.

Table 3.1: Digital applications used for co-creation

4 RESULTS AND DISCUSSION

Four themes were apparent from the analysis of the responses received. These themes are listed below with descriptions and selected illustrative examples from the focus group responses. Focus group participants have been referred to as participant 1, participant 2 and so on.

4.1 Benefits of including digital applications in the curriculum design

When asked to reflect on the extent to which the existing curriculum of the module 'Accountants in the Business Environment' provided them with opportunities to explore digital applications, participants responded that the scope was quite limited to only exploring Microsoft Office applications in the current curriculum design:

''Currently I have to say not enough at all, because I am really keen to explore more on how to use digital applications. It helps us improve our Information Technology (IT) skills and enhance employability skills. I hope the inclusion of digital applications for delivering the curriculum will be considered in other degree modules too''. (Participant 6)

Participants appreciated the necessity to be digitally brave and gain proficiency in using digital applications for learning since they believe it will enhance their employability skills by improving their IT skills. The student participants thought that it is imperative for institutions to ensure that the design of the curriculum maps students' digital competence levels with the expected levels of the graduate job market and that students are provided with the opportunity to further their digital proficiency levels through exploration of relevant applications in the process of the delivery of the curriculum. This resonates with arguments made by Woodcock (2012) and Jones, et al. (2012) on the shift in students' expectations of the use of technology in teaching and learning.

ISBN: 978-84-1319-033-4

Below are some opinions expressed by the participants when asked about the importance of digital bravery for undergraduate students in the HE sector:

''It is extremely important for every student to be digitally confident because everything we do is digital, at work, school and home''. (Participant 4)

''Very important, as the fear of exploring the digital aspects may delay many situations. Technology is a fast growing industry and the more practice the better''. (Participant, 5)

4.2 Impact of using digital applications for learning

All the focus group participants reported positive outcomes from the use of digital applications for learning and co-creation of e-learning materials. They felt that the implementation of digital applications in the learning process has enabled them to understand and apply theoretical concepts to contexts in relatively shorter span of time and encouraged them to think creatively which supports existing findings from literature (e.g. Neary, et al., 2013; Greaves, 2012; Van Dijk & Lazonder, 2016). Two out of six participants expressed that they felt challenged with regards to using the digital applications for learning in a time restricted session but this enabled them to identify weaknesses in their time management skills and take initiatives to develop these weaknesses:

''*Yes, challenges were to manage time effectively and communicate effectively using new platforms, but had the opportunity to explore and work on my weaknesses''. (Participant 3)*

However, majority of the participants felt this process of learning made them think more creatively since they could do multiple tasks with limited time and effort using the digital applications:

''I found it inspirational to be able to explore new digital applications in order to produce e-learning materials. It supported me in thinking creatively about learning new concepts''. (Participant 1)

''It increased my confidence in using technology for learning thus enabling me to be more creative in selecting the right medium for assessing my knowledge level''. (Participant 3)

Participants also felt that this initiative has helped them to gain relevant knowledge about how to appropriate readily accessible digital applications through laptop, desktop computers or smart phones for learning as well as to create digital learning materials and become active consumers of technology in the process rather than passive (Oddone, 2016). Some have exclaimed it to be an experience they have not encountered before and an initiative that has certainly helped to build their confidence on using technology for learning actively beyond the periphery of the classroom in a digitally connected world as suggested by Terrel (2017)..

4.3 SSP as an approach for curriculum redesign

Participants were asked to reflect on their experiences of engaging in SSP for redesigning the curriculum and its delivery. From the responses gathered, it appeared that the students perceived SSP to be an excellent way to assess and establish the necessity to redesign an existing module curriculum. Participants felt that SSP provides a suitable platform for student-staff collaboration to co-create digital contents for curriculum delivery since SSP values students' voices:

''I will be glad to see student-staff partnership be made compulsory in many higher educational institutions because I believe it will be of major benefit to all students in many ways''. (Participant 1)

Participants also felt that the SSP provided a relaxed, interactive and collaborative learning environment that encourages more student participation in the class in order to explore various skills development processes such as collaboration skills, communication and presentation skills. They also felt that SSP builds a healthy relationship between staff and students through effective communication. Engaging in partnerships made the participants feel good about being part of a project and actively learn in the process. These findings support the notion of engaging students in SSP (Bovill et al., 2011; Healey et al., 2014) for successful redesigning of the curriculum as emphasised by Bell et al. (2019):

''SSP is a good method to learn from each other''. (Participant 4)

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''Although some students like myself prefer to learn independently than in collaboration, I still found SSP as a brilliant initiative since I believe it changed my perception of university experience the more I got involved in this project''. (Participant 3)

Three of the participants however expressed that they did not feel any change in the way they interact with staff and other students during the partnership engagement process due to pre-existing levels of seniority between staff and students. As stressed by Mercer-Mapstone et al. (2017) and Rakrouki et al (2017), these participants thought that the power hierarchy between staff and students would seldom change in any staff-student partnership setting since some students would still consider their tutors as their superiors in the power hierarchy and as such treat them with the same respect that they would in a non-partnership setting. Due to this reason, some of the participants believed that students may not feel entirely confident in voicing their opinions while engaging in SSP initiatives.

4.4 SSP for developing inquiry and research skills

Participants' responses were mostly positive when inquired about the impact SSP had in the development of their independent inquiry skills through co-creation of digital contents:

''It is motivational to be able to actively contribute to self-development through SSP since it made me reflect on my enquiry skills while working with others''. (Participant 2)

''SSP has motivated me more towards my academic work. I have gained research skills and communication skills that will help me though my studies''. (Participant 6)

Participants also believed this particular SSP initiative provided them with an opportunity to develop better relationships with fellow student partners and gain the confidence to be more competent in expressing concerns and asking questions. Some felt that they have experienced the best method of learning and developing their inquiry skills though this collaborative partnership process of teaching and learning which supports findings from existing literature (e.g. Healey et al., 2014; McPherson and Heggie, 2015; Mathews, 2017; Matthews, et al., 2017;):

''SSP is a key opportunity to enhance academic progress for a better future. For example, new e-learning materials have been co-created and delivered by students in the class. This additional knowledge gained will help students to experience new technologies to learn independently''. (Participant 4)

5 CONCLUSION

Findings from this case study indicate that SSP as an approach proved to be effective in evaluating the necessity to redesign a module curriculum to embed digital applications for learning and promoting learners' digital literacy skills. It is evident from the perspectives gathered from participating students that the inclusion of digital applications for curriculum delivery enabled students to gain new knowledge on co-creation. SSP provided an engaging platform for both students and staff to explore, challenge and nurture their digital literacy skills in addition to building confidence in using technology proficiently for teaching and learning, communication and dissemination of information. A limitation of this study is the size of the focus group involved in the evaluation process. To address this issue, it would be beneficial to conduct another cycle of action research in the academic year 2018/19 for this module and use a mixed-methods research design to enable data triangulation and to gather further empirical evidence to support the rationale for redesigning the module curriculum. It would also be useful to undertake a systematic review of SSP literature to identify effective processes in shifting the barriers of power hierarchies in order to make the partnership process more evocative.

ACKNOWLEDGMENTS

This research study was approved for ethical compliance by The School of Education and Psychology's Research Ethics Committee, at the University of Bolton. The authors would like to thank all the first year undergraduate accountancy students who collaborated in this research study.

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